Notice of Allowability	Application No.	Applicant(s)	
	10/022,972	KUZEMCHAK ET AL.	
	Examiner	Art Unit	
	Chih-Ching Chow	2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *6/7/2006*.

2. ☒ The allowed claim(s) is/are *1 and 2*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 7/25/02
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Examiner's Statement of Reasons for Allowance

1. This action is responsive to Applicant's Appeal Brief filed on June 7, 2006.

Examiner's Statement of Reason(s) for Allowance

2. Claims 1-2 are allowed.

3. The following is an examiner's statement of reasons for allowance:
The prior arts of record: **Laurenti**, teaches a processor that is a programmable fixed point digital signal processor (DSP) with variable instruction length, offering both high code density and easy programming. Architecture and instruction set are optimized for low power consumption and high efficiency execution of DSP algorithms, such as for wireless telephones, as well as pure control tasks. The processor includes a multistage execution pipeline with pipeline protection features. **Fritz,** teaches a method for generating software development tools to be used in hardware and software development. The invention is utilized by processing a hardware description and a syntax description of programmable electronics, such as a microprocessor, and generating a set of development tools useful to a hardware and/or software developer. **Hayakawa,** teaches a micro processor adopting a 5-stage pipeline processing system. **Hasegawa,** teaches a pipeline processor is provided for executing a predictive branch instruction defining a number of at least one instruction which is to be executed in succession after the predictive branch instruction is given before a control flow is changed. **Guerra,** teaches a modeling and integration of cycle/phase-accurate instruction set architecture (ISA) models of digital signal processors. **Levitt**, teaches a novel, formal verification technique for proving the correctness of a pipelined microprocessor that focuses specifically on pipeline control logic. However, none of them, taken alone or in combination, teaches a method for determining in software the effective address of instructions in a program executed on a pipelined architecture where there is no external visibility into the pipeline, which

includes determining that a first instruction is in the pipeline; calculating the current effective address delay of the instruction in the pipeline; determining whether a valid effective address for the instruction is available based on the current effective address delay of the instruction; computing the effective address of the instruction responsive to determining that a valid effective address is not available; and reporting the effective address of the instruction; in such a manner as recited in independent claim 1, and as pointed out on pp. 5-7 of Appeal Brief dated 6/7/2006.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Ching Chow whose telephone number is 571-272-3693. The examiner can normally be reached on 7:00am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chih-Ching Chow
Examiner
Art Unit 2191
September 15, 2006

WEI ZHEN
SUPERVISORY PATENT EXAMINER

C.C.